NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

EXAMINER 23990 7590 10/07/2010 PHUNG, LUAT DOCKET CLERK P.O. DRAWER 800889 ARTHNIT DALLAS, TX 75380

PAPER NUMBER

DATE MAILED: 10/07/2010

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 10/810.302 03/26/2004 Nhut Neuven 2003.10.010.NS0 8022

TITLE OF INVENTION: APPARATUS AND METHOD FOR TESTING VOICE SYSTEMS IN A TELECOMMUNICATION NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/07/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	ed below or directed oth	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification a) specifying a new co	of maintenance fees rrespondence address	will be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use Bi			Note: A certificate of Fee(s) Transmittal. The papers. Each addition have its own certificat	al paper	, such as an assignme	or domestic mailings of the for any other accompanying ant or formal drawing, must
DOCKET CLE P.O. DRAWER DALLAS, TX 7	800889	/2010		Ce hereby certify that the states Postal Service addressed to the Mai ransmitted to the USI	rtificate nis Fee(with sur I Stop TO (57	e of Mailing or Trans s) Transmittal is being ficient postage for fir- ISSUE FEE address I) 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
							(Depositor's name)
							(Signature)
			l				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/810,302 TITLE OF INVENTION	03/26/2004 I: APPARATUS AND M	ETHOD FOR TESTING	Nhut Nguyen VOICE SYSTEMS IN	A TELECOMMUNI		003.10.010.NS0 N NETWORK	8022
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	E PREV. PAID ISSU	E FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$0		01/07/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	\neg			
PHUNG		2464	370-352000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address)2 or more recent) attach ND RESIDENCE DATA	nge of Correspondence Indication form ed. Use of a Customer A TO BE PRINTED ON	(I) the names of u or agents OR, alteri (2) the name of a s registered attorney 2 registered patent listed, no name will THE PATENT (print or	ngle firm (having as or agent) and the nan uttorneys or agents. If be printed.	a memb a memb nes of u no nan	p to pto se is 3	S. L. C.
(A) NAME OF ASSI	GNEE		(B) RESIDENCE: (C	TY and STATE OR	COUN	TRY)	ocument has been filed for
4a. The following fee(s) Issue Fee Publication Fee (N Advance Order	vo small entity discount p		b. Payment of Fee(s): (I A check is enclose Payment by credit The Director is her overpayment, to D	d. card. Form PTO-203	3 is atta	sched. required fee(s), any de	shown above) ficiency, or credit any n extra copy of this form).
	s SMALL ENTITY state	is. See 37 CFR 1.27.				ΓΙΤΥ status. Sec 37 Cl	
interest as shown by the	a runtication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	a from anyone other the Office.	in the applicant; a reg	istered	attorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No.				
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatis U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the in e Chief Information Of COMPLETED FORMS	or retain a benefit by estimated to take 12 dividual case. Any c ficer, U.S. Patent and TO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and is to complete, including its on the amount of times ark Office, U.S. Dep D TO: Commissioner	d by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

APPLICATION N	О.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/810,302		03/26/2004	Nhut Nguyen	2003.10.010.NS0	8022	
23990	7590	10/07/2010		EXAMINER		
DOCKET CLERK			PHUNG, LUAT			
P.O. DRAWE				ART UNIT	PAPER NUMBER	
DALLAS, TX 75380				2464		
				DATE MAILED: 10/07/2010		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 784 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 784 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/810 302 NGUYEN ET AL. Notice of Allowability Examiner Art Unit LUAT PHUNG 2464

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to Request for Continued Examination filed 7 September 2010. The allowed claim(s) is/are 1,2,6-12,16-21 and 24 (renumbered 1-16, respectively). 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \(\subseteq \text{Some* c) \subseteq \text{None of the:} a) \square All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Luat Phung/

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

Examiner, Art Unit 2464

Art Unit: 2464

EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- Authorization for this examiner's amendment was given in a telephone interview with Elizabeth Pham, on 29 September 2010.
- 3. The application has been amended as follows:

IN THE CLAIMS:

Page 3

Application/Control Number: 10/810,302

Art Unit: 2464

 (Currently Amended) For use in a telecommunication network, an apparatus for testing a telecommunication device comprising switching fabric including a plurality of voice paths, said apparatus comprising:

a test controller configured to receive a test call initiation message directed to the test controller from an originating terminal, to prompt the telecommunication device to allocate one of the voice paths within the telecommunication device for a test call based on the test call initiation message, and to establish a call connection for the test call between the originating terminal and a destination terminal via the allocated voice path and a packet-switched network to test the allocated voice path;

wherein the test controller comprises a simulator configured to verify a connection to the originating terminal through a signaling connection between the test controller and the originating terminal, wherein the connection is verified by simulating a connection to the originating terminal using a test call comprising at least one voice path within the switching fabric, fabric, and

wherein the originating terminal and the destination terminal are Session

Initiation Protocol (SIP) phones, and the test call initiation message is an INVITE

message addressed to an Internet Protocol (IP) address of said test controller.

(Original) The apparatus as set forth in Claim 1 wherein the voice paths comprise time division multiplexed (TDM) switched circuits.

3.-5. (Canceled)

Art Unit: 2464

(Currently Amended) The apparatus as set forth in Claim [[4]] 1
 wherein said test controller is configured to send a signaling message to an IP address of the destination terminal.

- 7. (Original) The apparatus as set forth in Claim 1 wherein said test controller is configured to send a signaling message to a device controller within said telecommunication device, said device controller allocating the allocated voice path.
- 8. (Previously Presented) The apparatus as set forth in Claim 1 wherein the allocated voice path provides a connection to a media gateway for converting between circuit-switched voice and packet-switched voice.

9. (Currently Amended) A telecommunication system for testing a telecommunication device comprising switching fabric including a plurality of voice paths, said telecommunication system comprising:

an originating terminal configured to generate a test call initiation message; and a test controller configured to receive the test call initiation message from the originating terminal, the test call initiation message being directed to the test controller, to prompt the telecommunication device to allocate one of the voice paths within the telecommunication device for a test call based on the test call initiation message, and to establish a call connection for the test call between the originating terminal and a destination terminal via the allocated voice path and a packet-switched network to test the allocated voice path:

wherein the test controller comprises a simulator configured to verify a connection to the originating terminal through a signaling connection between the test controller and the originating terminal, wherein the connection is verified by simulating a connection to the originating terminal using a test call comprising at least one voice path within the switching-fabrie-fabric, and

wherein the originating terminal and the destination terminal are Session Initiation Protocol (SIP) phones, and the test call initiation message is an INVITE message addressed to an Internet Protocol (IP) address of said test controller.

(Original) The telecommunication system as set forth in Claim 9
 wherein the voice paths comprise time division multiplexed (TDM) switched circuits.

11. (Original) The telecommunication system as set forth in Claim 9, further comprising:

a media gateway connected to said telecommunication device and the packetswitched network to convert between circuit-switched voice transmitted by said telecommunication device and packet-switched voice transmitted over the packetswitched network, the allocated voice path being connected to said media gateway for the test call.

12. (Previously Presented) The telecommunications system as set forth in Claim 9, wherein said telecommunication device comprises:

switching fabric including a plurality of voice circuits for switching voice calls; and a controller operable to receive a signaling message from said test controller to establish the call connection for the test call through the packet-switched network, said controller being further operable to allocate one of the voice circuits for the test call to test the allocated voice circuit.

13.-15. (Canceled)

16. (Currently Amended) The telecommunication system as set forth in Claim [[14]] 9 wherein said test controller is configured to send a signaling message to an IP address of the destination terminal.

Art Unit: 2464

17. (Original) The telecommunication system as set forth in Claim 9 wherein said test controller is configured to send a signaling message to a device controller within said telecommunication device, said device controller allocating the allocated voice path.

- (Original) The telecommunication system as set forth in Claim 9 wherein said telecommunication device is a switch.
- 19. (Original) The telecommunication system as set forth in Claim 18 wherein said switch is a mobile switching center.

Application/Control Number: 10/810,302

Art Unit: 2464

20. (Currently Amended) For use in a telecommunication system comprising a telecommunication device, said telecommunication device comprising switching fabric including a plurality of voice paths, a method of testing the voice paths in said telecommunication device, the method comprising the steps of:

receiving a test call initiation message directed to a test controller from an originating terminal;

sending a signaling message to the telecommunication device to allocate one of the voice paths for a test call in the telecommunication device based on the test call initiation message;

verifying a connection to the originating terminal through a signaling connection between the test controller and the originating terminal, wherein the connection is verified by simulating a connection to the originating terminal using a test call comprising at least one voice path within the switching fabric;

establishing a connection between the originating terminal and a destination terminal for the test call through a packet-switched network using the allocated voice path; and

testing the allocated voice path during the test[[call.]] call,

wherein the originating terminal and the destination terminal are Session Initiation Protocol (SIP) phones, and the test call initiation message is an INVITE message addressed to an Internet Protocol (IP) address of said test controller.

Art Unit: 2464

21. (Original) The method as set forth in Claim 20 further comprising the step of converting between circuit-switched voice transmitted by said telecommunication device and packet-switched voice transmitted over the packet-switched network.

- 22. (Canceled)
- 23. (Canceled)
- 24. (Currently Amended) The method as set forth in Claim [[22]] 20 wherein said establishing further comprises sending a signaling message from the test controller to an IP address of the destination terminal.

Art Unit: 2464

REASON FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1, 9 and 20, the prior art of record fails to anticipate or render obvious "wherein the originating terminal and the destination terminal are Session Initiation Protocol (SIP) phones, and the test call initiation message is an INVITE message addressed to an Internet Protocol (IP) address of said test controller" in combination with the other limitations of the claims. It is noted that the closest prior art references Goodman (US 7,173,910) and Baj (US 2002/0145979) shows establishing test calls and verifying voice path as recited in the last office action. However, they fail to disclose or render obvious the above quoted limitations as claimed.

Dependent claims 2, 6-8, 10-12, 16-19, 21 and 24 being further limiting to the independent claims, and enabled by the specification, are also allowed.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUAT PHUNG whose telephone number is (571)270Art Unit: 2464

3126. The examiner can normally be reached on M-Th 7:30 AM - 5:00 PM, F 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. P./ Examiner, Art Unit 2464

/Ricky Ngo/

Supervisory Patent Examiner, Art Unit 2464